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EXAMINER

MILORD, MARCEAU

ART UNIT

PAPER NUMBER

2618

DATE MAILED: 09/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/663,196	<b>Applicant(s)</b> GUPTA ET AL.	
	<b>Examiner</b> Marceau Milord	<b>Art Unit</b> 2618	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1, 15, 29, 57-60 are rejected under 35 U.S.C. 102(e) as being anticipated by Ollis et al (US Patent No 6999721 B2).

Regarding claim 1, Ollis et al discloses a method (figs. 1-2), comprising: sharing a Bluetooth communications module between a primary processor system (100) and a secondary processor system (202 or 204 of fig. 2; col. 5, lines 1-27; col. 5, line 37- col. 6, line 23).

Regarding claim 15, Ollis et al discloses a system, comprising: means for sharing a Bluetooth communications module between a primary processor system and a secondary processor system (202 or 204 of fig. 2; col. 5, lines 1-27; col. 5, line 37- col. 6, line 23).

Regarding claim 29, Ollis et al discloses a computer-readable medium (figs. 1-2) having stored thereon a plurality of instructions, said plurality of instructions when executed by a computer, cause said computer to perform: sharing a Bluetooth communications module between a primary processor system and a secondary processor system (202 or 204 of fig. 2; col. 5, lines 1-27; col. 5, line 37- col. 6, line 23).

Regarding claim 57, Ollis et al discloses an apparatus (figs. 1-2), comprising: a universal serial bus hardware interface; a Bluetooth sharing module coupled to the universal serial bus hardware interface; and a UART hardware interface coupled to the Bluetooth sharing module (202 or 204 of fig. 2; col. 5, lines 1-27; col. 5, line 37- col. 6, line 23).

Regarding claim 58, Ollis et al discloses an apparatus (figs. 1-2), wherein the Bluetooth sharing module includes: a UART serial driver to receive and send Bluetooth data packets with the UART hardware interface; and a USB function driver to receive and send the Bluetooth data packets with the USB hardware interface (col. 5, line 56- col. 6, line 23; col. 7, lines 4-22).

Regarding claim 59, Ollis et al discloses an apparatus (figs. 1-2), wherein the USB function driver includes a protocol translator to translate between USB and UART (col. 5, lines 25-67).

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Regarding claim 60, Ollis et al discloses an apparatus (figs. 1-2), wherein the sharing module shares a Bluetooth communications module between a primary processor system and a secondary processor system (col. 7, line 32- col. 8, line 9).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-14, 16-28, 30-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ollis et al (US Patent No 6999721 B2) in view of Ruutu (US Patent No 6940813 B2).

Regarding claims 2-5, 14, Ollis et al discloses everything claimed as explained in claim 1 above, except the features of routing Bluetooth communications between the primary processor system and the Bluetooth communications module via a sharing module; and routing Bluetooth communications between the secondary processor system and the Bluetooth communications module via the sharing module; wherein the sharing module does not modify software running on the primary processor system; presenting the Bluetooth communications module as a slave

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device; and presenting the primary processor system and secondary processor system as master devices to the Bluetooth communications module .

However, Ruutu, from the same field of endeavor, discloses a system and method for buffering messages between at least two applications over a network implementing a Quality of Service framework. Messages are transmitted from a source application to an intermediary message queue for message buffering. A message queue QoS is imparted at the message queue to the flow of the messages traversing the message queue, and the end-to-end QoS can then be provided for the flow of messages over the network (col. 2, lines 45-67; col. 3, line 28- col. 4, line 26). Furthermore, the processing unit may include one or more processors where the processing unit may include a master processor and associated slave processors coupled to communicate with the master processor. The processing unit controls the basic functions of the mobile terminal as dictated by programs available in the program storage/memory (col. 9, lines 10-49; col. 12, lines 10-52; col. 14, lines 35-52). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Ruutu to the communication system of Ollis in order to provide Bluetooth devices that can register with each other in order to share information and set up a connection in which the master controls the connection.

Regarding claim 6, Ollis et al as modified discloses a method (figs. 1-2), wherein the first transport mode includes a universal serial bus, an RS-232 connection, Fire wire, and mPCI; and wherein the second transport mode includes a universal serial bus, an RS-232 connection, Fire wire, and mPCI I (col. 5, lines 46-67).

Regarding claim 7, Ollis et al as modified discloses a method (figs. 1-2), wherein the communications module, the primary processor system and the secondary processor system are included in a notebook computer (col. 5, lines 12-27).

Regarding claim 8, Ollis et al as modified discloses a method (figs. 1-2), wherein the sharing module is integrated into the secondary processor system; and wherein the secondary processor system is a low-power computer system and the primary processor system is a main CPU/OS computer system (col. 6, lines 32-59).

Regarding claim 9, Ollis et al as modified discloses a method (figs. 1-2), wherein the sharing module is integrated into the secondary processor system, and the secondary processor system is a multi-function Bluetooth enabled device; and wherein the primary processor system includes a notebook, a tablet, a laptop, and a desktop computer system (col. 5, lines 1-36).

Regarding claim 10, Ollis et al as modified discloses a method (figs. 1-2), wherein the sharing module is integrated with a secondary controller of the secondary processor system (col. 5, line 31- col. 6, line 23).

Regarding claim 11, Ollis et al as modified discloses a method (figs. 1-2), wherein the sharing module is included in the primary processor system (col. 5, lines 1-36).

Regarding claim 12, Ollis et al as modified discloses a method (figs. 1-2), wherein the Bluetooth module communicates with one or more secondary Bluetooth devices (col. 5, line 46- col. 6, line 23).

Regarding claim 13, Ollis et al as modified discloses a method (figs. 1-2), wherein the sharing module communicates with a USB host controller and a Bluetooth controller (col. 5, line 46- col. 6, line 23).

Regarding claims 16-19, 28, Ollis et al discloses everything claimed as explained in claim 15 above, except the features of routing Bluetooth communications between the primary processor system and the Bluetooth communications module via a sharing module; and routing Bluetooth communications between the secondary processor system and the Bluetooth communications module via the sharing module; wherein the sharing module does not modify software running on the primary processor system; presenting the Bluetooth communications module as a slave device; and presenting the primary processor system and secondary processor system as master devices to the Bluetooth communications module .

However, Ruutu, from the same field of endeavor, discloses a system and method for buffering messages between at least two applications over a network implementing a Quality of Service framework. Messages are transmitted from a source application to an intermediary message queue for message buffering. A message queue QoS is imparted at the message queue to the flow of the messages traversing the message queue, and the end-to-end QoS can then be provided for the flow of messages over the network (col. 2, lines 45-67; col. 3, line 28- col. 4, line 26). Furthermore, the processing unit may include one or more processors where the processing unit may include a master processor and associated slave processors coupled to communicate with the master processor. The processing unit controls the basic functions of the mobile terminal as dictated by programs available in the program storage/memory (col. 9, lines 10-49; col. 12, lines 10-52; col. 14, lines 35-52). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Ruutu to the communication system of Ollis in order to provide Bluetooth devices that can register with each

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other in order to share information and set up a connection in which the master controls the connection.

Regarding claim 20, Ollis et al as modified discloses a system, wherein the first transport mode includes a universal serial bus (USB), an RS-232 connection, Fire wire, and mPCI; and wherein the second transport mode includes a universal serial bus (USB), an RS-232 connection, Fire wire, and mPCI (col. 5, lines 46-67).

Regarding claim 21, Ollis et al as modified discloses a system, wherein the communications module, the primary processor system and the secondary processor system are included in a notebook computer (col. 5, lines 12-27).

Regarding claim 22, Ollis et al as modified discloses a system, wherein the sharing module is integrated into the secondary processor system; and wherein the secondary processor system is a low-power computer system and the primary processor system is a main CPU/OS computer system (col. 6, lines 32-59).

Regarding claim 23, Ollis et al as modified discloses a system, wherein the sharing module is integrated into the secondary processor system, and the secondary processor system is a multi-function Bluetooth enabled device; and wherein the primary processor system includes a notebook, a tablet, a laptop, and a desktop computer system (col. 5, lines 1-36).

Regarding claim 24, Ollis et al as modified discloses a system, wherein the sharing module is integrated with a secondary controller of the secondary processor system (col. 5, line 31- col. 6, line 23).

Regarding claim 25, Ollis et al as modified discloses a system, wherein the sharing module is included in the primary processor system (col. 5, lines 1-36).

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Regarding claim 26, Ollis et al as modified discloses a system, wherein the Bluetooth module communicates with one or more secondary Bluetooth devices (col. 5, line 46- col. 6, line 23).

Regarding claim 27, Ollis et al as modified discloses a system, wherein the sharing module communicates with a USB host controller and a Bluetooth controller (col. 5, line 46- col. 6, line 23).

Regarding claims 30-33, 42, Ollis et al discloses everything claimed as explained in claim 15 above, except the features of routing Bluetooth communications between the primary processor system and the Bluetooth communications module via a sharing module; and routing Bluetooth communications between the secondary processor system and the Bluetooth communications module via the sharing module; wherein the sharing module does not modify software running on the primary processor system; presenting the Bluetooth communications module as a slave device; and presenting the primary processor system and secondary processor system as master devices to the Bluetooth communications module .

However, Ruutu, from the same field of endeavor, discloses a system and method for buffering messages between at least two applications over a network implementing a Quality of Service framework. Messages are transmitted from a source application to an intermediary message queue for message buffering. A message queue QoS is imparted at the message queue to the flow of the messages traversing the message queue, and the end-to-end QoS can then be provided for the flow of messages over the network (col. 2, lines 45-67; col. 3, line 28- col. 4, line 26). Furthermore, the processing unit may include one or more processors where the processing unit may include a master processor and associated slave processors coupled to

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communicate with the master processor. The processing unit controls the basic functions of the mobile terminal as dictated by programs available in the program storage/memory (col. 9, lines 10-49; col. 12, lines 10-52; col. 14, lines 35-52). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Ruutu to the communication system of Ollis in order to provide Bluetooth devices that can register with each other in order to share information and set up a connection in which the master controls the connection.

Regarding claim 34, Ollis et al as modified discloses a computer-readable medium (figs. 1-2) having stored thereon a plurality of instructions, wherein the first transport mode includes a universal serial bus (USB), an RS-232 connection, Fire wire, and mPCI; and wherein the second transport mode includes a universal serial bus, an RS-232 connection, Fire wire, and mPCI (col. 5, lines 46-67).

Regarding claim 35, Ollis et al as modified discloses a computer-readable medium (figs. 1-2) having stored thereon a plurality of instructions, wherein the communications module, the primary processor system and the secondary processor system are included in a notebook computer (col. 5, lines 12-27).

Regarding claim 36, Ollis et al as modified discloses a computer-readable medium (figs. 1-2) having stored thereon a plurality of instructions, wherein the sharing module is integrated into the secondary processor system; and wherein the secondary processor system is a low-power computer system and the primary processor system is a main CPU/OS computer system.

Regarding claim 37, Ollis et al as modified discloses a computer-readable medium (figs. 1-2) having stored thereon a plurality of instructions, wherein the sharing module is integrated

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into the secondary processor system, and the secondary processor system is a multi-function Bluetooth enabled device; and wherein the primary processor system includes a notebook, a tablet, a laptop, and a desktop computer system (col. 5, lines 1-36).

Regarding claim 38, Ollis et al as modified discloses a computer-readable medium (figs. 1-2) having stored thereon a plurality of instructions, wherein the sharing module is integrated with a secondary controller of the secondary processor system (col. 5, line 31- col. 6, line 23).

Regarding claim 39, Ollis et al as modified discloses a computer-readable medium (figs. 1-2) having stored thereon a plurality of instructions, wherein the sharing module is included in the primary processor system (col. 5, lines 1-36).

Regarding claim 40, Ollis et al as modified discloses a computer-readable medium (figs. 1-2) having stored thereon a plurality of instructions, wherein the Bluetooth module communicates with one or more secondary Bluetooth devices (col. 5, line 46- col. 6, line 23).

Regarding claim 41, Ollis et al as modified discloses a computer-readable medium (figs. 1-2) having stored thereon a plurality of instructions, wherein the sharing module communicates with a USB host controller and a Bluetooth controller (col. 5, line 46- col. 6, line 23).

Regarding claims 43-47, 56, Ollis et al discloses an apparatus (figs. 1-2), comprising: a Bluetooth sharing module; a Bluetooth communications module connected to the Bluetooth sharing module; a primary processor system (100) connected to the Bluetooth sharing module; and a secondary processor system connected to the Bluetooth sharing module (202 or 204 of fig. 2; col. 5, lines 1-27; col. 5, line 37- col. 6, line 23).

However, Ollis et al does not specifically disclose the features of a Bluetooth sharing module that is configured to allow the primary processor system and secondary processor system

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to share a host controller of the Bluetooth communications module, wherein the sharing module presents the Bluetooth communications module as a slave device; and presents the primary processor system and secondary processor system as master devices to the Bluetooth communications module; wherein the event includes opening of a computer lid, receiving a data message by the first processor system, receiving a data message by the second processor system, closing a computer lid, and receiving a switch command.

On the other hand, Ruutu, from the same field of endeavor, discloses a system and method for buffering messages between at least two applications over a network implementing a Quality of Service framework. Messages are transmitted from a source application to an intermediary message queue for message buffering. A message queue QoS is imparted at the message queue to the flow of the messages traversing the message queue, and the end-to-end QoS can then be provided for the flow of messages over the network (col. 2, lines 45-67; col. 3, line 28- col. 4, line 26). Furthermore, the processing unit may include one or more processors where the processing unit may include a master processor and associated slave processors coupled to communicate with the master processor. The processing unit controls the basic functions of the mobile terminal as dictated by programs available in the program storage/memory (col. 9, lines 10-49; col. 12, lines 10-52; col. 14, lines 35-52). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Ruutu to the communication system of Ollis in order to provide Bluetooth devices that can register with each other in order to share information and set up a connection in which the master controls the connection.

Regarding claim 48, Ollis et al as modified discloses an apparatus (figs. 1-2), wherein the first transport mode includes a universal serial bus, an RS-232 connection, Fire wire, and mPCI; and wherein the second transport mode includes a universal serial bus, an RS-232 connection, Fire wire, and mPCI (col. 5, lines 46-67).

Regarding claim 49, Ollis et al as modified discloses an apparatus (figs. 1-2), wherein the sharing module, the primary processor system and the secondary processor system are included in a notebook computer (col. 5, lines 12-27).

Regarding claim 50, Ollis et al as modified discloses an apparatus (figs. 1-2), wherein the sharing module is integrated into the secondary processor system; and wherein the secondary processor system is a low-power computer system and the primary processor system is a main CPU/OS computer system (col. 6, lines 32-59).

Regarding claim 51, Ollis et al as modified discloses an apparatus (figs. 1-2), wherein the sharing module is integrated into the secondary processor system, and the secondary processor system is a multi-function Bluetooth enabled device; and wherein the primary processor system includes a notebook, a tablet, a laptop, and a desktop computer system (col. 5, lines 1-36).

Regarding claim 52, Ollis et al as modified discloses an apparatus (figs. 1-2), wherein the sharing module is integrated with a secondary controller of the secondary processor system (col. 5, line 31- col. 6, line 23).

Regarding claim 53, Ollis et al as modified discloses an apparatus (figs. 1-2), wherein the sharing module is included in the primary processor system (col. 5, lines 1-36).

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Regarding claim 54, Ollis et al as modified discloses an apparatus (figs. 1-2), wherein the Bluetooth module communicates with one or more secondary Bluetooth devices (col. 5, line 46- col. 6, line 23).

Regarding claim 55, Ollis et al as modified discloses an apparatus (figs. 1-2), wherein the sharing module communicates with a USB host controller and a Bluetooth controller (col. 5, line 46- col. 6, line 23).

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Park discloses a link communication method between communications terminals equipped with Bluetooth wireless devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marceau Milord whose telephone number is 571-272-7853. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MARCEAU MILORD

Marceau Milord  
Primary Examiner  
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**MARCEAU MILORD**  
**PRIMARY EXAMINER**

9-10-06